

City of Beaverton									
BID TABULATION									
AQUIFER STORAGE AND RECOVERY (ASR) NO. 5 WELL DRILLING PROJECT									
SOLICITATION # 3074-16B									
				Holt Services, Inc. Puyallup, WA			Schneider Water Services Saint Paul, OR		
ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE		TOTAL	UNIT PRICE		TOTAL
General									
1	Erosion Control	1	LS	\$ 25,000		\$ 25,000.00	\$25,000.00		\$ 25,000.00
2	Water Management	1	LS	35,000.00		35,000.00	\$65,000.00		65,000.00
Site Exploration Test Well Drilling and Installation									
3	Drill 28-inch from ground to 170 feet below ground surface (ft bgs)	170	LF	450.00	per/foot	76,500.00	\$890.00	per/foot	151,300.00
4	Furnish and install 24-inch nominal 0.375-inch wall low carbon steel casing	170	LF	115.00	per/foot	19,550.00	\$227.00	per/foot	38,590.00
5	Install cement grout seal	170	LF	110.00	per/foot	18,700.00	\$115.00	per/foot	19,550.00
6	Drill 16-inch nominal from 170 ft bgs to 500 ft bgs using RC drilling method	330	LF	205.00	per/foot	67,650.00	\$390.00	per/foot	128,700.00
7	Install 12-inch temporary liner from 170 ft bgs to 500 ft bgs, and install a temporary seal at the bottom and install a 1-inch drop pipe between the liner and the borehole for temporary water level measurements	330	LF	45.00	per/foot	14,850.00	\$121.00	per/foot	39,930.00
8	Drill 12-inch nominal borehole from 500 ft bgs to 1,000 ft bgs	500	LF	125.00	per/foot	62,500.00	\$170.00	per/foot	85,000.00
9	Conduct well development	8	Hours	600.00	per/hour	4,800.00	\$500.00	per/hour	4,000.00
10	Complete a video log of the entire borehole	1	LS	1,800.00		1,800.00	\$1,900.00		1,900.00
11	Furnish and install necessary piping and equipment and install a temporary pump in the 12-inch liner to 400 ft bgs and pump test the well; testing will include an 8-hour step test, followed by a 120 hour constant rate test at 1,000 gpm. Test also includes collecting recovery data for up to 120 hours before pulling equipment and resuming drilling activities	1	LS	66,200.00		66,200.00	\$80,760.00		80,760.00
12	Standby time for up to 3 days	3	per/day	1,250.00		3,750.00	\$850.00		2,550.00
Base Bid for General and Site Exploration Bid Items 1 through 12:						\$ 396,300.00			\$ 642,280.00
13	Mobilization and Demobilization including all equipment and incidental items for installing and testing the new ASR test well, and site prep (CANNOT total more than 25% of Base Bid amount (lines 1 through 12) or the bid in its entirety will be rejected).	1	LS	\$82,000.00		\$ 82,000.00	\$160,570.00		\$ 160,570.00
Final Well Development (preferred)									
14	Remove temporary casing and ream the borehole from 16-inch diameter to 24-inch diameter from 170 ft bgs to 500 ft bgs	330	LF	\$ 225.00	per/foot	\$ 74,250.00	\$ 470.00	per/foot	\$ 155,100.00
15	Furnish and install 20-inch 0.375-inch walled low carbon steel well screen with milled perforations (from 200 to 235 ft bgs and from 355 to 475 ft bgs) as described in these specifications	155	LF	175.00	per/foot	27,125.00	\$307.00	per/foot	47,585.00
16	Furnish and install 20-inch 0.375-inch walled low carbon steel liner assembly from 162 to 500 ft bgs. The liner assembly shall have 8 feet of blank casing at the top extending into the permanent well casing, and blank casing over the remaining portion of the liner assembly based on the screen intervals and as described in these specifications. The top of the liner assembly will be equipped with an Addco setting sub or equivalent	183	LF	120.00	per/foot	21,960.00	\$187.00	per/foot	34,221.00
17	Ream the lower borehole from 500 ft bgs to 1,000 ft bgs from 12-inch to 20-inch diameter.	500	LF	205.00	per/foot	102,500.00	\$270.00	per/foot	135,000.00
18	Conduct well development	8	Hours	600.00	per/hour	4,800.00	\$500.00	per/hour	4,000.00
19	Furnish and install 16-inch 0.375-inch walled low carbon steel well screen with milled perforations (from 600 to 800 ft bgs) as described in these specifications	200	LF	119.00	per/foot	23,800.00	\$205.00	per/foot	41,000.00
20	Furnish and install 16-inch 0.375-inch walled low carbon steel liner assembly from 492 to 1,000 ft bgs. The liner assembly shall have 8 feet of blank casing at the top extending into the upper liner assembly, and blank casing over the remaining portion of the liner assembly based on the screen interval and as described in these specifications. The top of the liner assembly will be equipped with an Addco setting sub or equivalent	308	LF	94.00	per/foot	28,952.00	\$124.00	per/foot	38,192.00
Final Work on Completed Well									
21	Video log final borehole	1	LS	\$ 1,800.00		\$ 1,800.00	\$ 1,900.00		\$ 1,900.00
22	Standby Time	16	Hours	275.00	per/hour	4,400.00	\$300.00	per/hour	4,800.00
23	Plumbness and Alignment Testing	1	LS	4,750.00		4,750.00	\$3,000.00		3,000.00
24	Preauthorized Rig Time	16	Hours	480.00	per/hour	7,680.00	\$500.00	per/hour	8,000.00

Final Basalt Aquifer Testing									
25	Furnish, install necessary equipment including temporary test pump, to complete the basalt aquifer testing	1	LS	\$42,000.00		\$ 42,000.00	\$ 37,000.00		\$ 37,000.00
26	Perform step rate pump test	8	Hours	305.00	per/hour	2,440.00	\$370.00	per/hour	2,960.00
27	Perform constant rate pump test at 2,100 gpm (120 hours for pumping and up to 120 hours for recovery - no time paid for recovery)	120	Hours	285.00	per/hour	34,200.00	\$340.00	per/hour	40,800.00
28	Well Disinfection and completion of an above grade (3-ft stickup) well cover with an access port. Installation of three yellow-painted bollards	1	LS	3,700.00		3,700.00	\$3,000.00		3,000.00
Conversion of ASR 1 as a Nested Monitoring Well									
29	Complete a video log of the borehole prior to conversion	1	LS	1,800.00		1,800.00	\$1,900.00		1,900.00
30	Complete ASR 1 as a nested monitoring well <i>with</i> three 2-inch galvanized steel pipes with screen lengths ranging from 20 to 5 feet and set at the depths shown in Figure 6. Please note the set depth of the screens may vary slightly based on the video log findings. The nested monitoring well shall have cement grout seals between each interflow zone as shown in Figure 6 to isolate each screen interval. In addition the cement grout seal shall extend from the upper interflow zone to the surface and the permanent 16-inch casing in the well shall be perforated prior to completing the well as a nested monitoring well. This line item also includes all work necessary to convert the ASR 1 monitoring well as shown in Figure 6, inclusive of all necessary permitting as well as special standards from OWRD. As part of this effort the contractor shall also remove the existing pump system and store it on-site for the City	1	LS	68,000.00		68,000.00	\$93,400.00		93,400.00
31	Extra Work Authorized*					40,000.00			40,000.00
Total Bid Cost (Items 1 through 31):						\$ 972,457.00			\$1,494,708.00
<p>* "Extra Work As Authorized" is additional work tasks, not specifically required or implied by the contract, that an authorized city representative specifically requests in writing for a contractor to perform. Execution of a construction contract is not a specific request for a contractor to perform any additional work.</p>									
Bid Alternate #1 Completion (Upper Borehole Only)									
				Holt Services, Inc. Puyallup, WA			Schneider Water Services Saint Paul, OR		
ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE		TOTAL	UNIT PRICE		TOTAL
1	Seal the lower borehole from 1,000 ft bgs to 500 ft bgs	500	LF	\$ 80.00	per/foot	\$ 40,000.00	\$ 98.00	per/foot	\$ 49,000.00
2	Remove temporary casing and ream the borehole from 16-inch diameter to 24-inch diameter from 170 ft bgs to 500 ft bgs	330	LF	275.00	per/foot	90,750.00	\$470.00	per/foot	155,100.00
3	Furnish and install 20-inch 0.375-inch walled low carbon steel well screen with milled perforations (from 200 to 235 ft bgs and from 355 to 475 ft bgs) as described in these specifications	155	LF	195.00	per/foot	30,225.00	\$307.00	per/foot	47,585.00
4	Furnish and install 20-inch 0.375-inch walled low carbon steel liner assembly from 162 to 500 ft bgs. The liner assembly shall have 8 feet of blank casing at the top extending into the permanent well casing, and blank casing over the remaining portion of the liner assembly based on the screen intervals as described in these specifications. The top of the liner assembly will be equipped with an Addco setting sub or equivalent	183	LF	140.00	per/foot	25,620.00	\$187.00	per/foot	34,221.00
Total Bid Alternate 1:						\$ 186,595.00			\$ 285,906.00
Bid Alternate #2 Completion (Lower Borehole Only)									
				Holt Services, Inc. Puyallup, WA			Schneider Water Services Saint Paul, OR		
ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE		TOTAL	UNIT PRICE		TOTAL
1	Remove temporary casing and ream the borehole from 16-inch diameter to 24-inch diameter from 170 ft bgs to 500 ft bgs	330	LF	\$ 275.00	per/foot	\$ 90,750.00	\$ 470.00	per/foot	\$ 155,100.00
2	Furnish and install 20-inch 0.375-inch walled low carbon steel casing from 162 ft bgs to 500 ft bgs	338	LF	140.00	per/foot	47,320.00	187.00	per/foot	63,206.00
3	Install cement grout seal from 162 ft bgs to 500 ft bgs	330	LF	150.00	per/foot	49,500.00	169.00	per/foot	55,770.00
4	Ream the lower borehole from 500 ft bgs to 1,000 ft bgs from 12-inch to 20-inch diameter	500	LF	250.00	per/foot	125,000.00	270.00	per/foot	135,000.00
5	Conduct well development	8	Hours	600.00	per/hour	4,800.00	500.00	per/hour	4,000.00
6	Furnish and install 16-inch 0.375-inch walled low carbon steel well screen with milled perforations (from 600 to 800 ft bgs) as described in these specifications	200	LF	135.00	per/foot	27,000.00	205.00	per/foot	41,000.00
7	Furnish and install 16-inch 0.375-inch walled low carbon steel liner assembly from 492 to 1,000 ft bgs. The liner assembly shall have 8 feet of blank casing at the top extending into the upper liner assembly, and blank casing over the remaining portion of the liner assembly based on the screen interval and as described in these specifications. The top of the liner assembly will be equipped with an Addco setting sub or equivalent	308	LF	115.00	per/foot	35,420.00	124.00	per/foot	38,192.00
Total Bid Alternate 2:						\$379,790.00			\$ 492,268.00